

the pond lies in a belt of more or less similar country which apparently extends along the western border of Rhode Island all the way from Westerly to a point near Webster, Massachusetts. Any part of it is likely to repay exploration.

EAST HARTFORD, CONNECTICUT.

BROMELICA (THURBER): A NEW GENUS OF GRASSES.

OLIVER ATKINS FARWELL.

FOR some years past our eastern species of Oat Grass have been bandied about between *Avena* and *Melica*, affording for some a merry game of shuttlecock. These species appear to have no permanent home and to be a restless group, that, like Banquo's Ghost, will not down. It seems best, therefore, to create a new genus for them. At least one of that small group of grasses, to which belong our eastern Oat Grasses, has been included at one time or another in five different genera, *Festuca*, *Bromus*, *Melica*, *Avena* and *Trisetum*. As regards our eastern species Michaux first described *Avena striata* in 1803; Torrey next described it as *Trisetum purpurascens*; A. Gray replaced it in *Avena* using Michaux's name; Hitchcock then removed it to *Melica* as *M. striata*; finally Nash restored it to *Avena* as *A. Torreyi*. The second species was described by Porter in 1867 as *Avena Smithii* and it was removed to *Melica* by Vasey in 1888. At the present time Hitchcock, in Gray's Manual, lists these species under *Melica*; Britton & Brown in the Illustrated Flora list them under *Avena*; Rydberg in the Flora of the Rocky Mountains steers an intermediate course listing the first under *Avena* and the second under *Melica*. When authors are at such wide variance with each other in their treatment of such closely related species, the probabilities are that the species do not belong to any one of the genera to which they have been referred. A careful analysis of the distinguishing characters of each genus bears out this supposition.

These species can scarcely belong to *Avena* since they lack the most important *tribal characters* distinctive of the *Aveneae*, viz.: the spine-like end of the rachilla prolonged behind the uppermost floret and glumes *longer* than the lower floret. They do agree with the *Festuceae*

in not possessing the spine-like elongation of the rachilla and in having glumes shorter than the lower floret. A genus of the *Festuceae* must then be sought for these species and amongst those genera having many nerved lemmas. They do not belong to *Festuca* because the lemmas are *not entire*. They do not belong to *Bromus* because the grain is *not adherent to the palet nor pubescent* at the summit. They do not belong to *Melica* because the *lemmas are not subcoriaceous* and the uppermost *do not form a convolute club-shaped mass* but are *distinct*. In *Bromelica* the glumes and lemmas are *membranous*, the former being somewhat *unequal and shorter* than the lowest floret; the latter are *acute, notched or bidentate*, generally with a *terminal awn* formed by the excurrent midrib between the teeth, the uppermost being *similar to the others and distinct*, the uppermost floret consisting of a single lemma only. Thus delimited, *Melica* and *Bromelica* consist, each of a clear, homogeneous group of species; united, *Melica* is a heterogeneous group. *Bromelica* is almost exactly intermediate between *Melica* and *Bromus*, with closer relationship to the latter than to the former, which is exemplified by habit and by the characters of the glumes and lemmas; if *Bromelica* is retained in *Melica* there is no good reason why *Melica* in its entirety should not be united with *Bromus*.

Lemmas membranous, all alike and distinct, acute, awned or awnless.

Lemmas entire. *Festuca*.

Lemmas notched or bidentate.

Grain adherent to the palet and pubescent at apex. *Bromus*.

Grain free, not pubescent. *Bromelica*.

Lemmas subcoriaceous, obtuse, convolute around each other and forming a club-shaped mass. *Melica*.

The synonymy and species follow:

BROMELICA (Thurber), n. gen. *Melica* subgenus *Bromelica* Thurber, Bot. Calif. ii. 304 (1880), and in Gray's Manual, ed. 6, 152 (1908).

B. striata (Mx.), n. comb. *Avena striata* Mx. Fl. Bor. Am. i. 73 (1803). *Trisetum purpurascens* Torr. Fl. U. S. 127 (1824). *Melica striata* (Mx.) Hitchc. RHODORA, viii. 211 (1906). *Avena Torreyi* Nash in Britt. & Br. Illus. Fl. ed. 2, i. 219 (1913).

B. Smithii (Porter), n. comb. *Avena Smithii* Porter in Gray's Manual, ed. 5, 640 (1867). *Melica Smithii* (Porter) Vasey, Bull. Torr. Cl. xv. 294 (1888).

B. aristata (Thurber), n. comb. *Melica aristata* Thurber in Boland. Proc. Cal. Acad. iv. 103 (1870).

B. subulata (Bong.), n. comb. *Festuca subulata* Bong. Veg. Sitch. 173 (1832). *Bromus subulatus* Griseb. in Ledeb. Fl. Ross. iv. 358 (1853). *Melica acuminata* Boland. Proc. Cal. Acad. iv. 104 (1870). *M. subulata* Scribn. Proc. Acad. Phila. 47 (1885).

B. Harfordii (Boland.), n. comb. *Melica Harfordii* Boland. Proc. Cal. Acad. 47 (1885).

B. HARFORDII, var. **minor** (Vasey), n. comb. *Melica Harfordii*, var. *minor* Vasey, Bull. Torr. Cl. xv. 48 (1888). *M. Harfordii*, subsp. *tenuior* Piper, Cont. U. S. Nat. Herb. xi. 127 (1906).

B. Geyeri (Munro), n. comb. *Melica Geyeri* Munro in Boland. Proc. Cal. Acad. iv. 103 (1870). *M. bromoides* Boland. ex A. Gray, Proc. Am. Acad. viii. 409 (1872).

B. GEYERI, var. **Howellii** (Scribn.), n. comb. *Melica bromoides*, var. *Howellii* Scribn. Proc. Acad. Philad. 47 (1885).

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Detroit, Michigan.

REPORTS ON THE FLORA OF THE BOSTON DISTRICT,—XXX.

LINACEAE.

LINUM.

L. medium (Planch.) Britton. Dry soil, ten scattered stations, none in Essex county.

L. striatum Walt. Rock Pond, Georgetown (*Mrs. C. N. S. Horner*, no date); Cedar Swamp, Peabody (*J. H. Sears*, July 12, 1887); Essex Woods (*J. H. Sears & J. Robinson*, September, 1880); old railway track under Elm St., Dedham (*K. M. Wiegand & Margaret Heatley*, July 23, 1908).

L. sulcatum Riddell. Middlesex Fells (*F. S. Collins*, Aug. 8, 1885); roadside, Winchester (*W. Boott*, Sept. 13, 1868; *C. W. Jenks & C. W. Swan*, July 19, 1890); Boston (*F. Boott*, —, 1822).

L. USITATISSIMUM L. Roadsides and waste places, frequent.

L. virginianum L. Dry gravelly and sandy soil; well distributed, especially southward.